## CLAIMS:

- 1. A data processing apparatus for a semiconductor manufacturing apparatus, comprising:
- a semiconductor manufacturing apparatus for executing processing for a wafer;
- a data collecting semiconductor device for collecting processing data generated in association with the processing; and
- a data copying semiconductor device for extracting the processing data collected in said data collecting semiconductor device and for producing a copy of the processing data.
- 2. A data processing apparatus for a semiconductor manufacturing apparatus according to claim 1, wherein:

said data collecting semiconductor device includes a diagnosing section for diagnosing said semiconductor manufacturing apparatus; and

data analyzing means produces a diagnosis criterion of said diagnosing section or a model formula for diagnosis and transfers the diagnosis criterion or the model formula for diagnosis to said diagnosing section.

3. A data processing apparatus for a semiconductor manufacturing apparatus according to claim 1, wherein said data copying semiconductor device is attached onto a data collector, said data copying semiconductor device being removable and being

independently transported.

- 4. A data processing apparatus for a semiconductor manufacturing apparatus, comprising:
- a semiconductor manufacturing apparatus for executing processing for a wafer;
- a data collecting semiconductor device for collecting processing data generated in association with the processing;
- a data copying semiconductor device for extracting the processing data collected in said data collecting semiconductor device and for producing a copy of the processing data; and

data analyzing means for analyzing the data copy produced by said data copying semiconductor device and for diagnosing a processing state of said processing apparatus.

5. A data processing apparatus for a semiconductor manufacturing apparatus according to claim 4, wherein:

said data collecting semiconductor device includes a diagnosing section for diagnosing said semiconductor manufacturing apparatus; and

said data analyzing means produces a diagnosis criterion of said diagnosing section or a model formula for diagnosis and transfers the diagnosis criterion or the model formula for diagnosis to said diagnosing section.

A data processing apparatus for a semicon-

ductor manufacturing apparatus according to claim 4, wherein said data copying semiconductor device is attached onto a data collector, said data copying semiconductor device being removable and being independently transported.

- 7. A data processing apparatus for a semiconductor manufacturing apparatus, comprising:
- a semiconductor manufacturing apparatus for executing processing for a wafer;
- a data collecting semiconductor device for collecting processing data generated in association with the processing;
- a data copying semiconductor device for extracting, according to an extraction condition inputted from an external semiconductor device, the processing data collected in said data collecting semiconductor device and for producing a copy of the processing data; and

data analyzing means for analyzing the data copy produced by said data copying semiconductor device and for diagnosing a processing state of said processing apparatus.

8. A data processing apparatus for a semiconductor manufacturing apparatus according to claim 7, wherein:

said data collecting semiconductor device includes a diagnosing section for diagnosing said semiconductor manufacturing apparatus; and

said data analyzing means produces a diagnosis criterion of said diagnosing section or a model formula for diagnosis and transfers the diagnosis criterion or the model formula for diagnosis to said diagnosing section.

- 9. A data processing apparatus for a semiconductor manufacturing apparatus according to claim 7, wherein said data copying semiconductor device is attached onto a data collector, said data copying semiconductor device being removable and being independently transported.
- 10. A data processing apparatus for a semiconductor manufacturing apparatus according to claim 7, wherein input means for inputting the extraction condition is protected by authenticating means.